

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
11 March 2004 (11.03.2004)

PCT

(10) International Publication Number
WO 2004/020409 A1

(51) International Patent Classification⁷: C07D 209/12,
A61K 31/404, A61P 3/10, C07D 401/04, 209/36, 413/04,
209/30, 401/06, 405/06, 403/12, 209/10

0907 (US). BLACK, Regina, M. [US/US]; 126 East Lin-
coln Avenue, Rahway, NJ 07065-0907 (US).

(21) International Application Number:
PCT/US2003/027156

(74) Common Representative: MERCK & CO., INC.; 126
East Lincoln Avenue, Rahway, NJ 07065-0907 (US).

(22) International Filing Date: 27 August 2003 (27.08.2003)

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK,
LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX,
MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD,
SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG,
US, UZ, VC, VN, YU, ZA, ZM, ZW.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/406,741 29 August 2002 (29.08.2002) US
60/440,672 17 January 2003 (17.01.2003) US

(84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (*for all designated States except US*): MERCK
& CO., INC. [US/US]; 126 East Lincoln Avenue, Rahway,
NJ 07065-0907 (US).

(72) Inventors; and

Published:

(75) Inventors/Applicants (*for US only*): ACTON, John, J.,
III [US/US]; 126 East Lincoln Avenue, Rahway, NJ 07065-
0907 (US). DEBENHAM, Sheryl, D. [US/US]; 126 East
Lincoln Avenue, Rahway, NJ 07065-0907 (US). LIU, Kun
[CN/US]; 126 East Lincoln Avenue, Rahway, NJ 07065-
0907 (US). MEINKE, Peter, T. [US/US]; 126 East Lincoln
Avenue, Rahway, NJ 07065-0907 (US). WOOD, Harold,
B. [US/US]; 126 East Lincoln Avenue, Rahway, NJ 07065-

— with international search report
— before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

*For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*

(54) Title: INDOLES HAVING ANTI-DIABETIC ACTIVITY

(57) Abstract: Indoles having aryloxyalkanoic acid substituents or arylalkanoic acid substituents are agonists or partial agonists of PPAR gamma and are useful in the treatment and control of hyperglycemia that is symptomatic of type II diabetes, as well as dyslipidemia, hyperlipidemia, hypercholesterolemia, hypertriglyceridemia, and obesity that are often associated with type 2 diabetes.



WO 2004/020409 A1